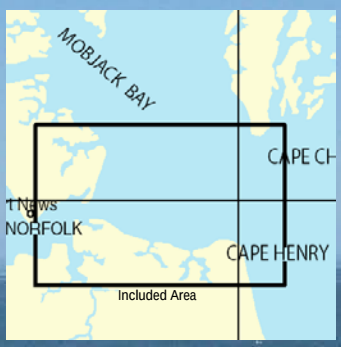
BookletChart™

Chesapeake Bay – Cape Charles to Norfolk Harbor

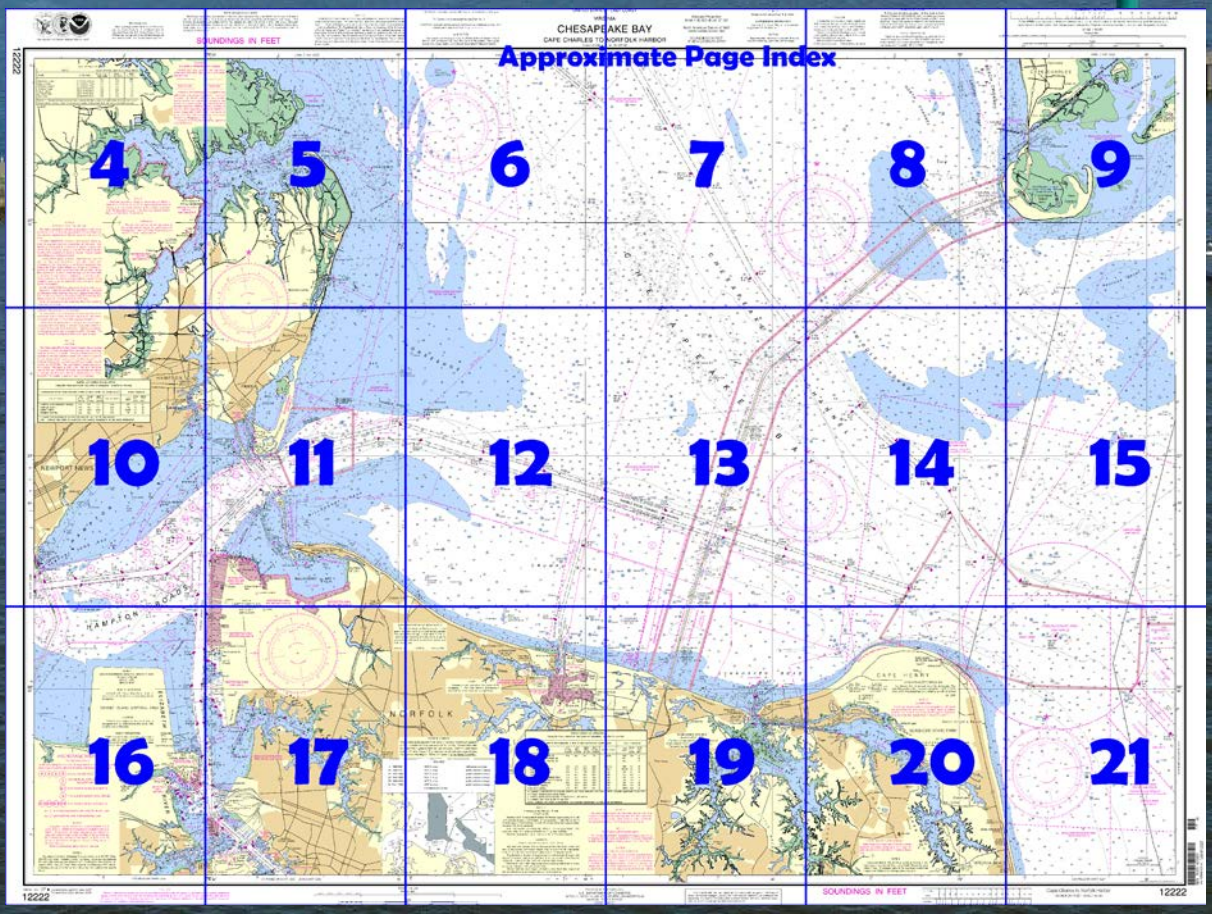
NOAA Chart 12222

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=12222

(Selected Excerpts from Coast Pilot)
Cape Henry Light (36°55.6'N., 76°00.4'W.), 164 feet above the water, is shown from an octagonal, pyramidal tower, upper and lower half of each face alternately black and white, on the beach near the turn of the **Chesapeake Bay Bridge** extends from Cape Charles to a point 6 miles westward of Cape Henry. Channel buoys, lights, daybeacons and fog signals mark the openings at Chesapeake and Thimble Shoal Channels. At night the floodlighted tunnel houses are more prominent than the lights marking the channels.
The current velocity is 1.0 knot on the flood and 1.5 knots on the ebb in Chesapeake Bay Entrance.
Thimble Shoal Channel is a **Regulated Navigation Area** and draft limitations apply. A vessel drawing less than 25 feet may not enter the channel, unless the vessel is crossing the channel.
Lynnhaven Roads is used as an anchorage. The dumping ground in the western part has shoals and obstructions with depths as little as 11 feet; elsewhere depths are 20 to 28 feet.
There are two small craft openings in the Chesapeake Bay Bridge-Tunnel south of Thimble Shoal Channel. Each span has a clearance of 21 feet.
Lynnhaven Inlet. In 2000, the controlling depth in the entrance channel was 6½ feet. The inlet is marked by lights.
Lynnhaven Bay has a turning basin south of the highway bridge over the inlet. The bay has depths of 1 to 10 ft.
Caution.–The Chesapeake Bay Bridge-Tunnel complex has on several occasions suffered damage from vessels. In every case, adverse weather prevailed with accompanying strong winds from the northwest quadrant generally related to a frontal system. Weather deterioration in the lower bay is quite often sudden and violent and constitutes an extreme hazard to vessels operating or anchoring in this area. The proximity of the bridge-tunnel complex to main shipping channels and anchorages adds to the danger. Currents in excess of 3.0 knots can be expected in the area.
Traffic Separation Scheme (Chesapeake Bay Entrance).–The scheme provides for inbound-outbound traffic lanes to enter or depart Chesapeake Bay from the northeastward and from the southeast-ward. (See chart 12221.)
A precautionary area with a radius of 2 miles is centered on Chesapeake Bay Entrance Lighted Whistle Buoy CH (36°56'08"N., 75°57'27"W.). A racon is at the buoy.
The northeasterly inbound-outbound traffic lanes are separated by a line of four fairway buoys on bearing 250°-070°. The outermost buoy in the line is 6.4 miles 313° from Chesapeake Light and the innermost buoy is 4.5 miles 074° from Cape Henry Light.
The southeasterly approach is marked by Chesapeake Bay Southern Approach Lighted Whistle Buoy CB (36°49'00"N., 75°45'36"W.). A racon is on the buoy. The inbound/outbound traffic lanes are separated by a **Deep-Water Route** marked by lighted buoys on bearings 302°-122° and 317°-137°. The Deep-Water Route is intended for deep draft vessels and naval aircraft carriers entering or departing Chesapeake Bay. A vessel using the Deep-Water Route is advised to announce its intentions on VHF-FM channel 16 as it approaches Lighted Whistle Buoy CB on the south end, and Lighted Whistle Buoy CH on the north end of the route. All other vessels approaching the Chesapeake Bay Traffic Separation Scheme should use the appropriate inbound/outbound lanes of the northeasterly or southeasterly approaches.
The Coast Guard advises that upon entering the traffic lanes, all inbound vessels are encouraged to make a security broadcast on VHF-FM channel 13, announcing the vessel's name, location, and intentions.
Currents.–The current velocity is 1.0 knot on the flood and 1.5 knots on the ebb in Chesapeake Bay Entrance. (See the Tidal Current Tables for daily predictions.)
Naval and **general anchorages** are south of Thimble Shoal Channel. (See **110.1 and 110.168**, chapter 2, for limits and regulations.)
Thimble Shoal Channel is a **Regulated Navigation Area** and draft limitations apply. A vessel drawing less than 25 feet may not enter the channel, unless the vessel is crossing the channel. (See **165.501**, chapter 2, for limits and regulations.)

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Norfolk	Commander 5th CG District Norfolk, VA	(575) 398-6231

Table of Selected Chart Notes

HEIGHTS

Heights in feet above Mean High Water.

Mercator Projection
Scale 1:40,000 at Lat. 37° 00'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

THE NARROWS

A depth of 6 feet for a width of 90 feet was available in the improved channel through The Narrows.

Jun 2008

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 6° from the normal variation have been observed 3 to 17 nautical miles offshore from Cape Henry to Currituck Beach Light.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Norfolk, VA	KHB-37	162.550 MHz

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.529" northward and 1.221" eastward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

LYNNHAVEN INLET TO BROAD BAY

Lynnhaven Inlet is subject to continual change. The controlling depth in the improved channel from 36°54'15.2" N 76°05'16.2" W to Broad Bay is 6½ feet for a width of 90 feet.

Sep 2011

ANCHORAGE AREAS

110.168 (see note A)

Limits and designations of anchorage areas are shown in magenta. See chart 12253 for additional areas not shown on this chart.

- A B C D — NAVAL ANCHORAGE
- E — COMMERCIAL EXPLOSIVES ANCHORAGE
- E-1 — EXPLOSIVES HANDLING BERTH
- G — NAVAL EXPLOSIVES ANCHORAGE
- G-1 G-2 G-3 G-4 — EXPLOSIVES HANDLING BERTH

ALL OTHER ANCHORAGES ARE FOR GENERAL USE

ALL OTHER BERTHS ARE FOR GENERAL USE

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: ——— — ——— —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — — —

TIDAL INFORMATION

PLACE NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Fishermans Island	(37°06'N/75°59'W)	3.4	3.2	0.1
Messick Point	(37°07'N/76°19'W)	2.6	2.5	0.2
Old Point Comfort	(37°00'N/76°19'W)	2.8	2.6	0.1
Hampton Roads	(36°57'N/76°20'W)	2.8	2.5	0.1
Craney Island	(36°54'N/76°20'W)	2.9	2.7	0.1
Lynnhaven Inlet	(36°54'N/76°05'W)	2.6	2.4	0.1
Cape Henry	(36°56'N/76°00'W)	3.5	3.2	0.1

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Aug 2011)

HAMPTON, PHOEBUS AND WILLOUGHBY CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2011

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HAMPTON RIVER ENTRANCE CHANNEL	12.0	12.0	12.0	6,7-11	200	1.1	12
HAMPTON REACH	10.5	11.7	11.3	6,7-11	150	1.2	12
SUNSET CREEK	N/A	A7.4	N/A	6,7-11	100-80	0.5	12
PHOEBUS CHANNEL	12.5	12.1	11.7	6-03	150	0.7	12
WILLOUGHBY CHANNEL	2.4	2.5	9.8	6-10	B300	1.4	10

A. 80% OF PROJECT WIDTH (40%) ON EITHER SIDE OF CENTERLINE.
B. CHANNEL WIDTH MAINTAINED AT 200 FEET SOUTH OF 36°58'43.0"N, 76°18'38.5"W.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

THE NATION'S CHARTMAKER SINCE 1807

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.529" northward and 1.221" eastward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for N and critical corrections. Charts are printed when ordered using Print-on-Demand t Editions are available 2-8 weeks before their release as traditional NOAA charts. As about Print-on-Demand charts or contact NOAA at http://ocsdata.ncd.noaa.gov/idr OceanGrafix at 1-877-56CHART or http://www.oceangrafix.com.

SOUNDINGS IN FEET

12222

76°20'

37°05'

TIDAL INFORMATION

PLACE NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Fishermans Island	(37°06'N/75°59'W)	3.4	3.2	0.1
Messick Point	(37°07'N/76°19'W)	2.6	2.5	0.2
Old Point Comfort	(37°00'N/76°19'W)	2.8	2.6	0.1
Hampton Roads	(36°57'N/76°20'W)	2.8	2.5	0.1
Craney Island	(36°54'N/76°20'W)	2.9	2.7	0.1
Lynnhaven Inlet	(36°54'N/76°05'W)	2.6	2.4	0.1
Cape Henry	(36°56'N/76°00'W)	3.5	3.2	0.1

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Aug 2011)

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOTE J

Restricted area 334.275 begins at the entrance to Tide Mills Creek at 37° 03' 50" N, 76° 22' 00" W; thence along the shoreline of Langley Air Force Base 35 yards off the ordinary mean high water (MHW) mark to a point in the Northwest Branch of Back River at 37° 06' 40" N, 76° 22' 55" W.

NOTE G

TRAFFIC SEPARATION SCHEME

The traffic separation scheme is designed to aid in the prevention of collisions at the approaches to Chesapeake Bay and does not supersede or alter the applicable Rules of the Road.

The RECOMMENDED routes for entering and departing from Chesapeake Bay are overprinted on this chart. The Northeast Approach is marked by a tinted magenta line centered on a line of fairway buoys which separates the courses of inbound and outbound vessels. Vessels should leave all buoys on their port hand.

It is RECOMMENDED that the following ships use the Southern Approach deep-water route when bound for Chesapeake Bay from sea or to sea from Chesapeake Bay: Deep-draft ships, drafts defined as 42 feet/12.8 meters or greater in fresh water, and naval aircraft carriers. Ships drawing less than 42 feet/12.8 meters may use the deep-water route when, in their master's judgment, the effects of ship characteristics, its speed, and prevailing environmental conditions may cause the draft of the ship to equal or exceed 42 feet/12.8 meters.

It is RECOMMENDED that a ship using the deep-water route:

Announce its intention on VHF-FM channel 16 as it approaches Chesapeake Bay Southern Approach Lighted Whistle Buoy "CB" on the south end, or Chesapeake Bay Entrance Lighted Whistle Buoy "CH", on the north end of the route;

Avoid, as far as practicable, overtaking other ships operating in the deep-water route;

Keep as near to the outer limit of the route which lies on the starboard side as is safe and practicable.

All other ships approaching the Chesapeake Bay traffic separation scheme should use the appropriate inbound or outbound traffic lane of the traffic separation scheme.

Traffic within the precautionary area may consist of vessels operating between Thimble Shoal and Chesapeake Channels and one of the established traffic lanes. Mariners are advised to exercise extreme care in navigating within this area. The

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

Joins page 10

4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Notices to Mariners
d technology. New
sk your chart agent
drs/inquiry.aspx, or

T

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

Additional information can be obtained at nauticalcharts.noaa.gov.

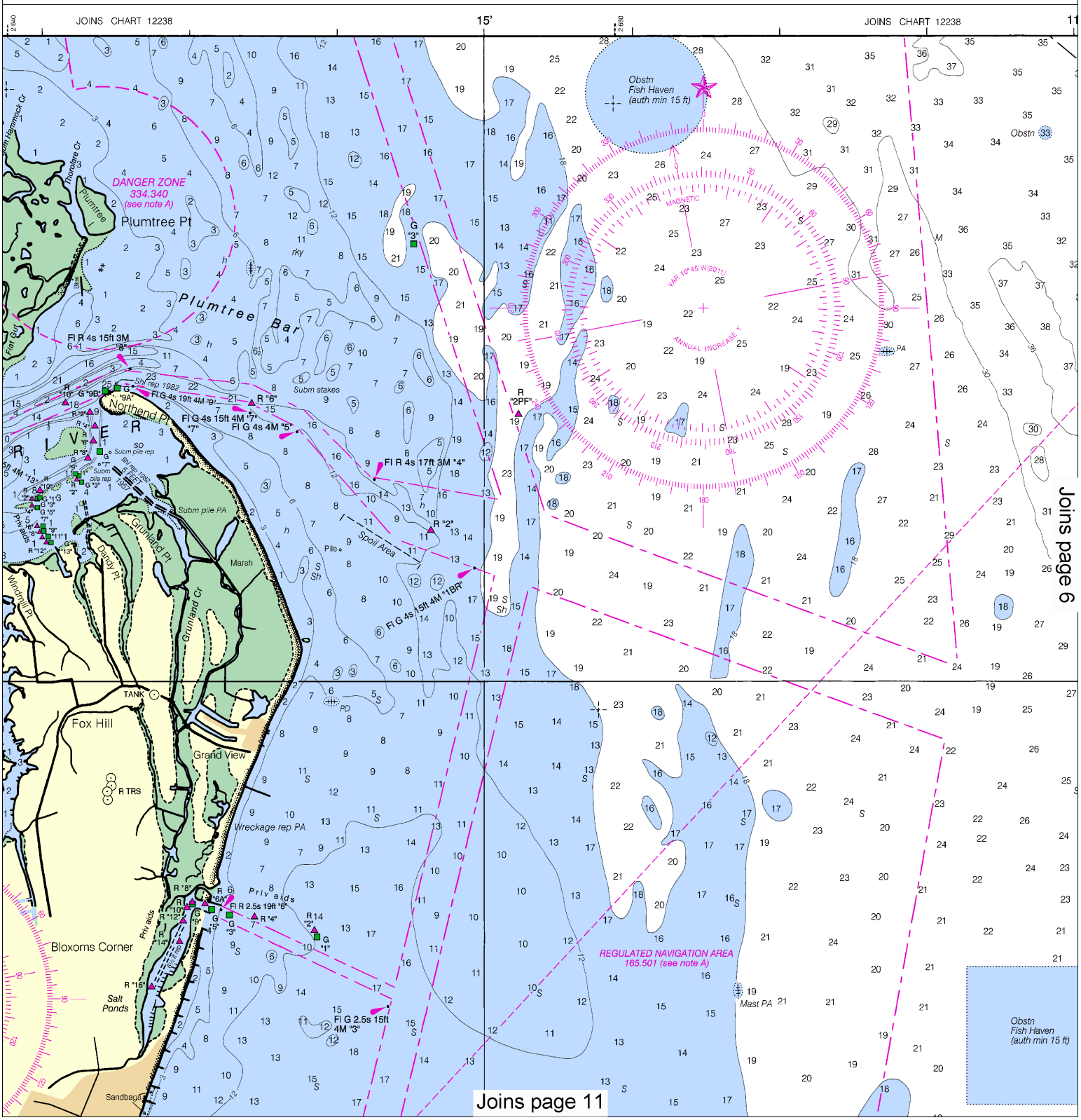
For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — —

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

C



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:53333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

NOTE X

…autical mile Territorial Sea, established by Presidential Proclamation, …s apply. The Three Nautical Mile Line, previously identified as the …rritorial sea, is retained as it continues to depict the jurisdictional …aws. The 9-nautical mile Natural Resource Boundary off the Gulf coast …and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in …ner limit of Federal fisheries jurisdiction and the outer limit of the …states. The 24-nautical mile Contiguous Zone and the 200-nautical …conomic Zone were established by Presidential Proclamation. …eaty or the U.S. Supreme Court, these maritime limits are subject

Additional information can be obtained at nauticalcharts.noaa.gov.

For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: - - - - -

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

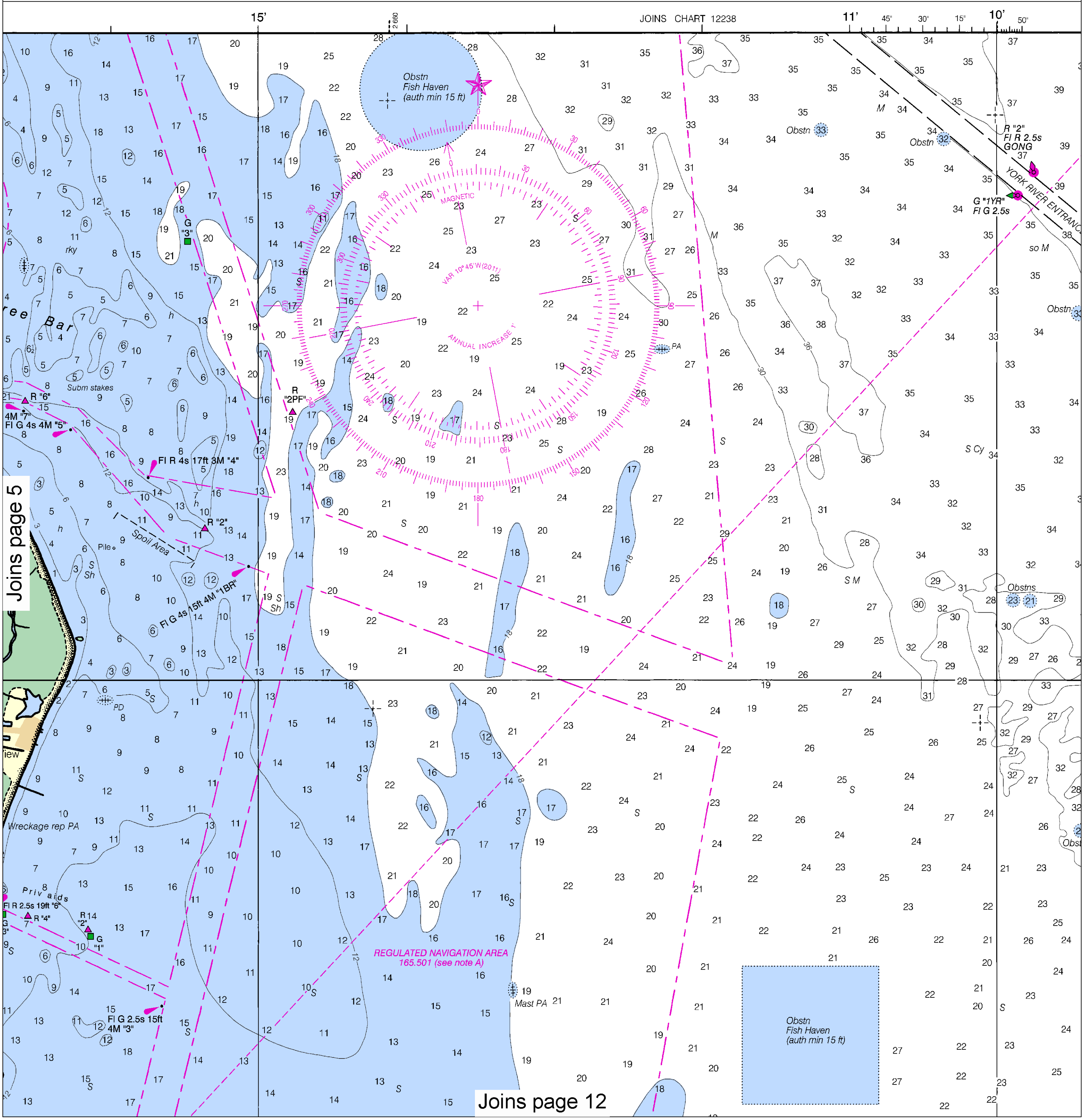
UNITED STATES

VIRGI

CHESAPE

CAPE CHARLES TO

Formerly C&GS 562, 1st Ed



6

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000

Nautical Miles

Yards

See Note on page 5.

S - EAST COAST

GINIA

EAKE BAY

NORFOLK HARBOR

Ed., Mar. 1964 KAPP 559

Mercator Projection
Scale 1:40,000 at Lat. 37° 00'

North American Datum of 1983
(World Geodetic System 1984)

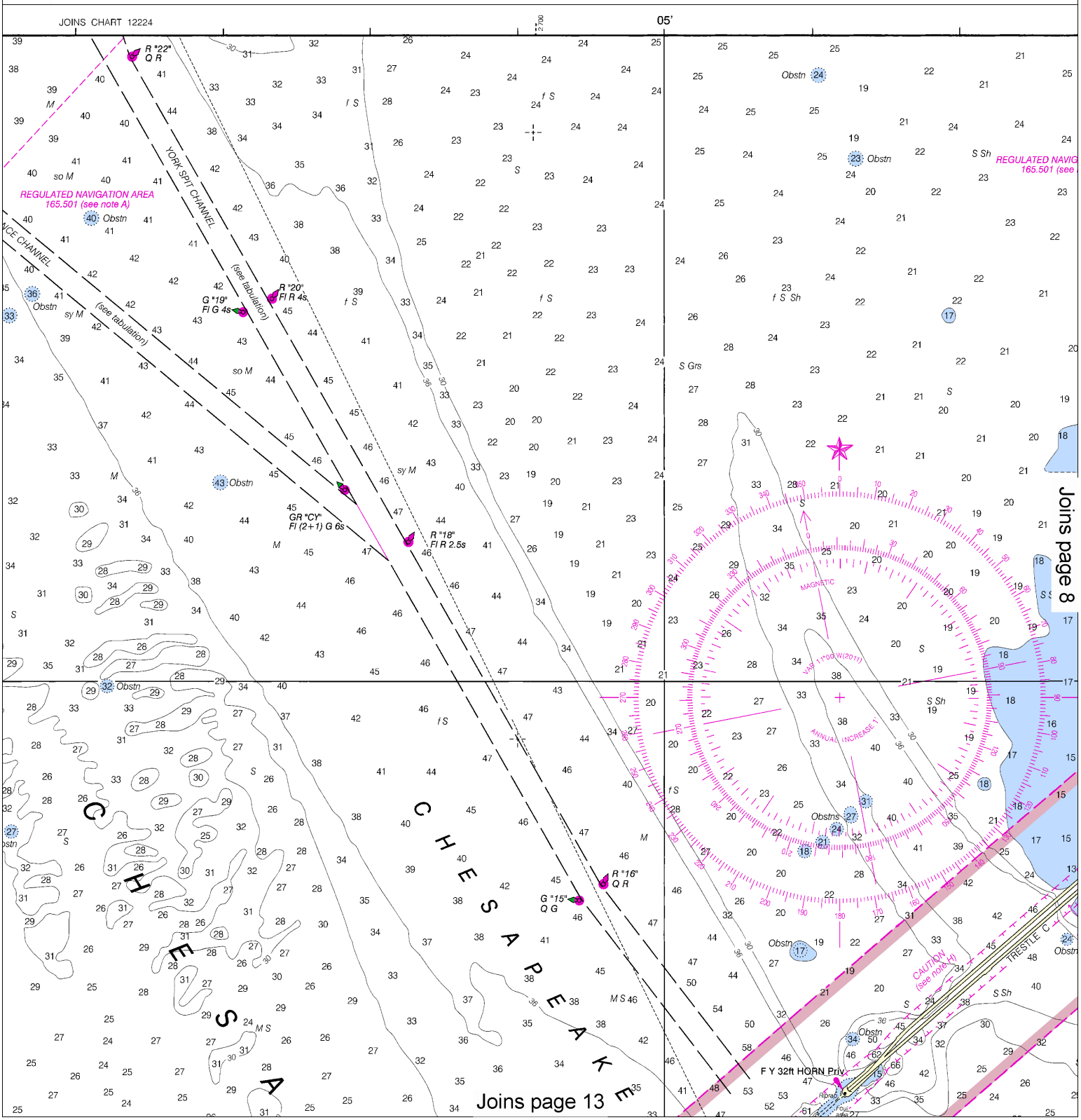
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

HEIGHTS
Heights in feet above Mean High Water.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4812 11/27/2012,
NGA Weekly Notice to Mariners: 4912 12/8/2012,
Canadian Coast Guard Notice to Mariners: n/a.

Mercator Projection
Scale 1:40,000 at Lat. 37° 00'

North American Datum of 1983
(World Geodetic System 1984)

R

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

HEIGHTS
Heights in feet above Mean High Water.

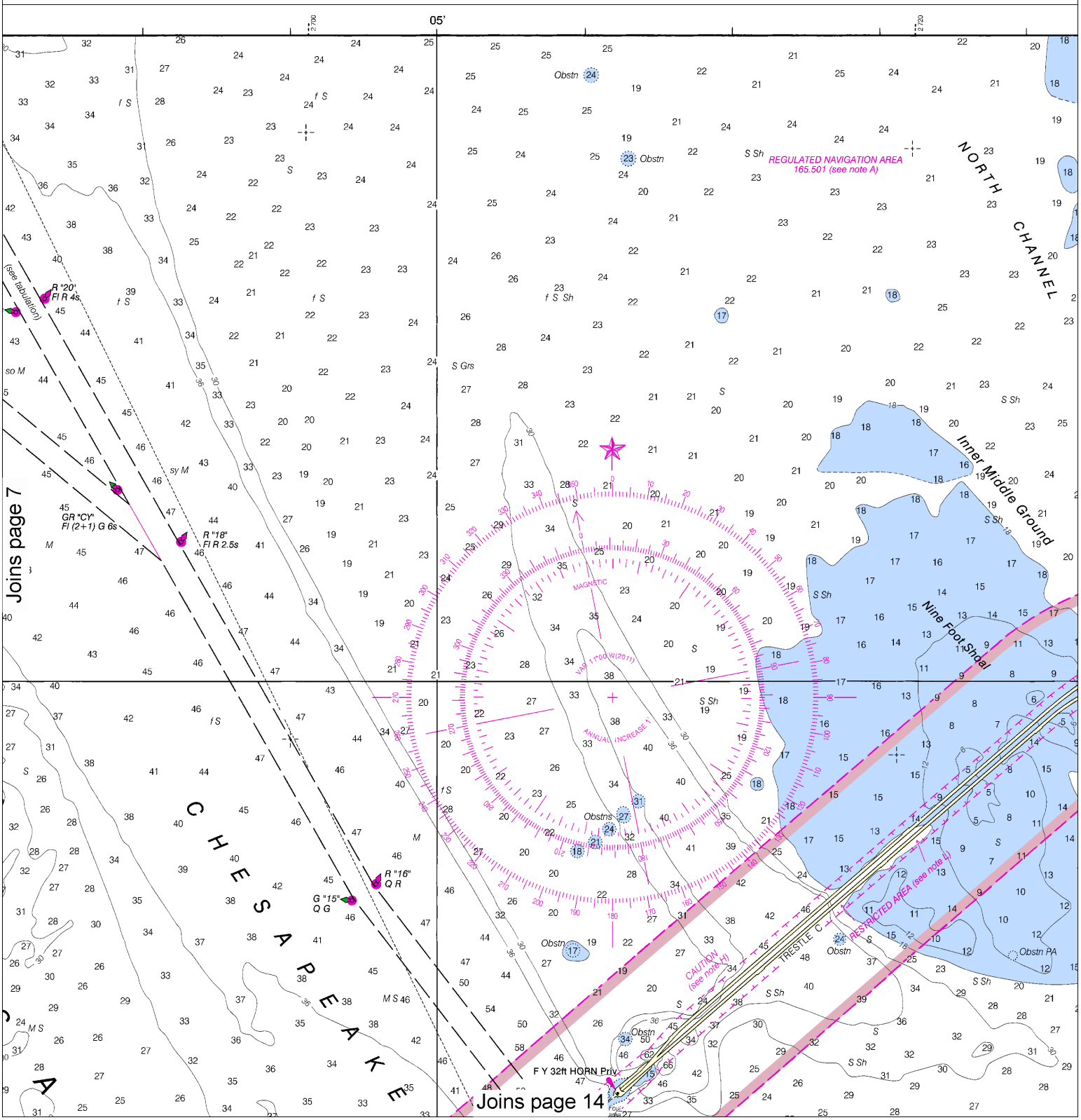
SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.



8

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles
1 ½ 0 1 2 3

Yards
1000 0 1000 2000 3000 4000 5000

See Note on page 5.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

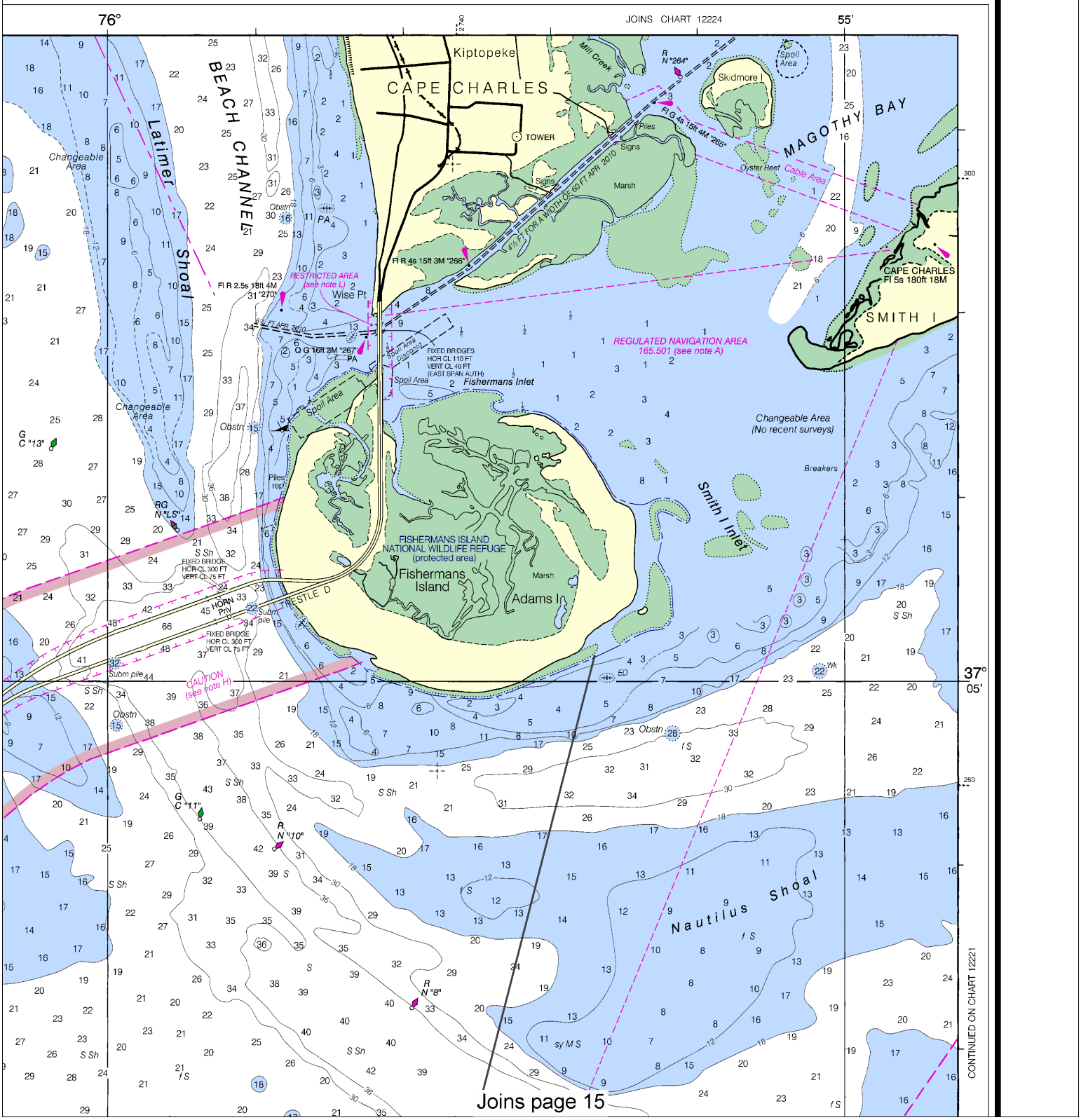
SCALE 1:40,000

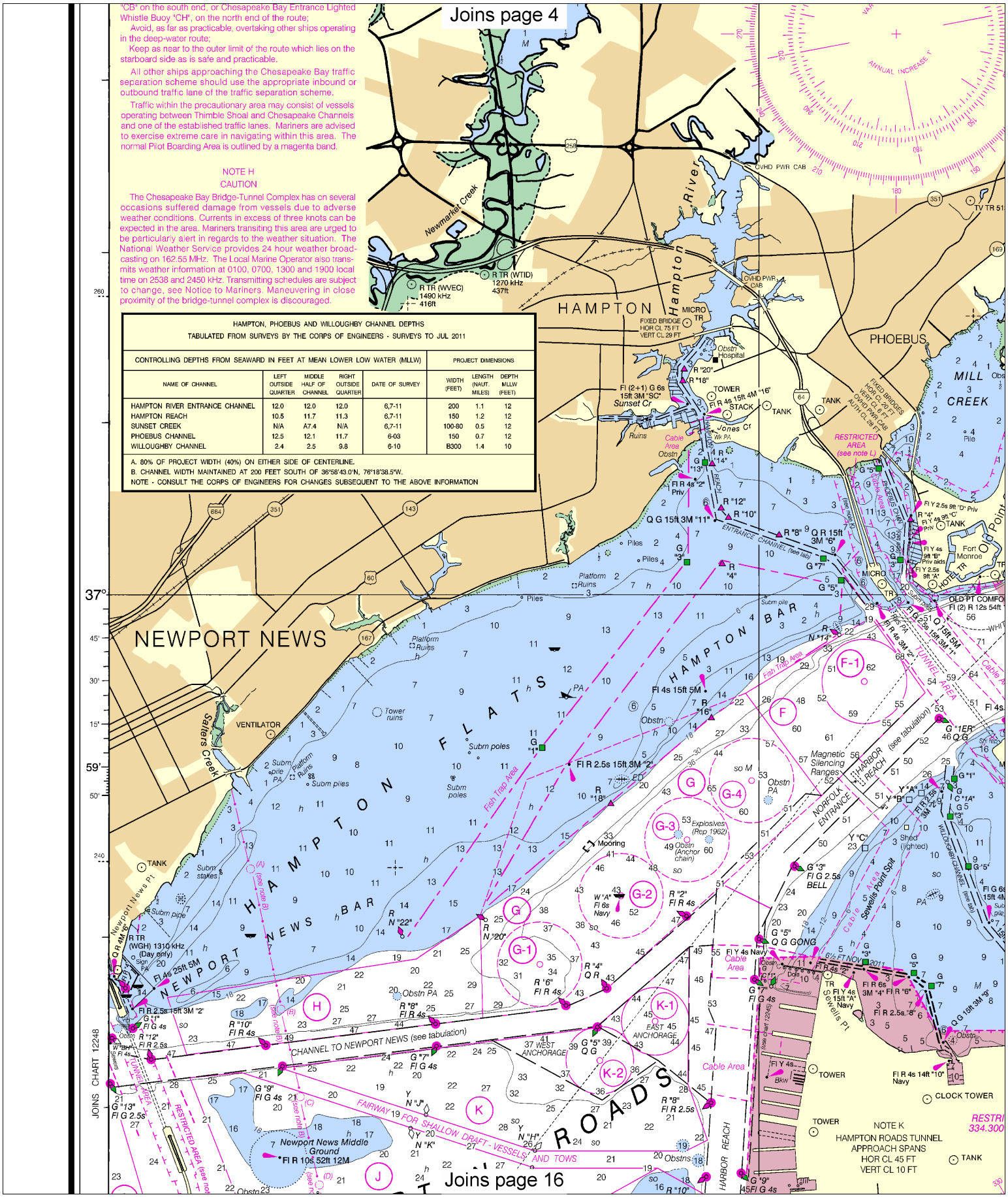
Nautical Miles

1 0 1 2 3

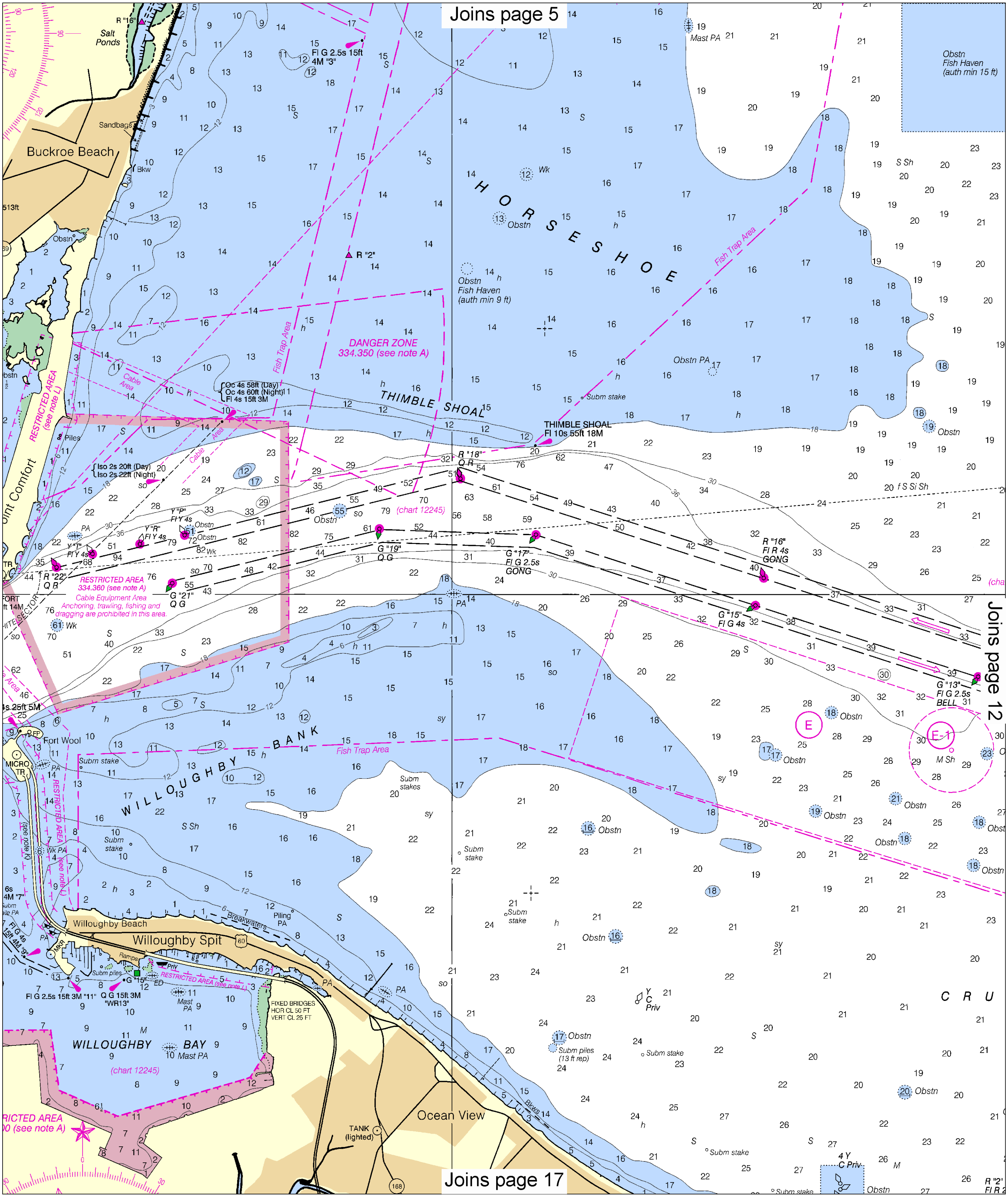
Yards

1000 0 1000 2000 3000 4000 5000

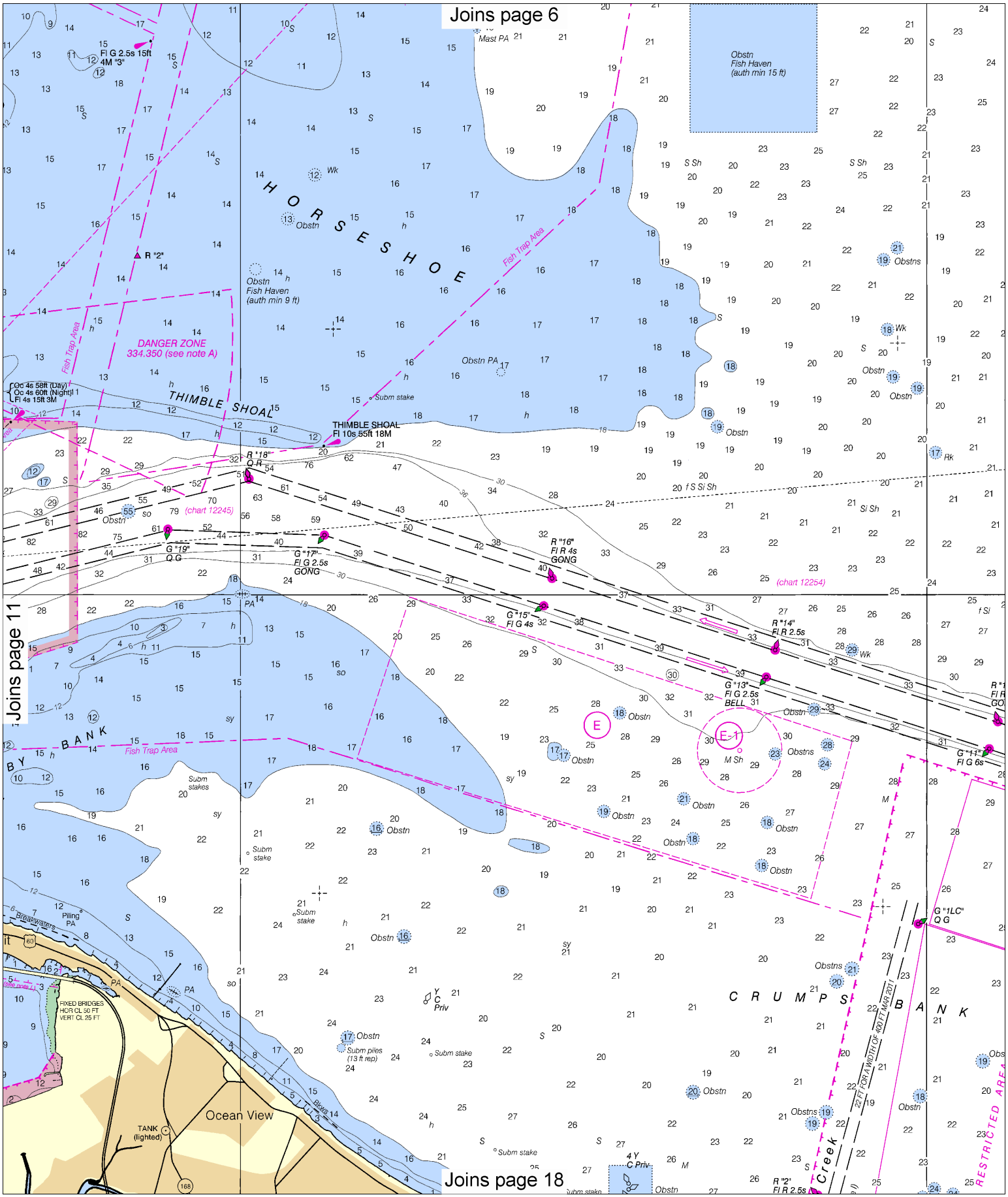




Note: Chart grid lines are aligned with true north.



Joins page 5
Joins page 12
Joins page 17
Salt Ponds
Buckroe Beach
Sandbags
HORSESHOE
THIMBLE SHOAL
THIMBLE SHOAL
Fl 10s 55ft 18M
DANGER ZONE
334.350 (see note A)
RESTRICTED AREA
334.360 (see note A)
Cable Equipment Area
Anchoring, trawling, fishing and dragging are prohibited in this area.
RESTRICTED AREA (see note L)
Fish Trap Area
Cable Area
Obstn Fish Haven (auth min 9 ft)
Obstn Fish Haven (auth min 15 ft)
Fl G 2.5s 15ft 4M "3"
R "2"
R "18" Q R
G "19" Q G
G "17" Fl G 2.5s GONG
R "16" Fl R 4s GONG
G "15" Fl G 4s
G "13" Fl G 2.5s BELL
R "22" Q R
G "21" Q G
Y "P" Fl Y 4s
Y "R" Fl Y 4s
Y "T" Fl Y 4s
Iso 2s 20ft (Day)
Iso 2s 22ft (Night)
Oc 4s 58ft (Day)
Oc 4s 60ft (Night)
Fl 4s 15ft 3M
(chart 12245)
Fort Wool
WILLOUGHBY BANK
Willoughby Beach
Willoughby Spit
Breakwaters
FIXED BRIDGES HOR CL 50 FT VERT CL 25 FT
WILLOUGHBY BAY
(chart 12245)
Fl G 2.5s 15ft 3M "11"
Q G 15ft 3M "WR13"
Ocean View
TANK (lighted)
Point Comfort
C R U
E
E-1
Subm stake
Obstn



12

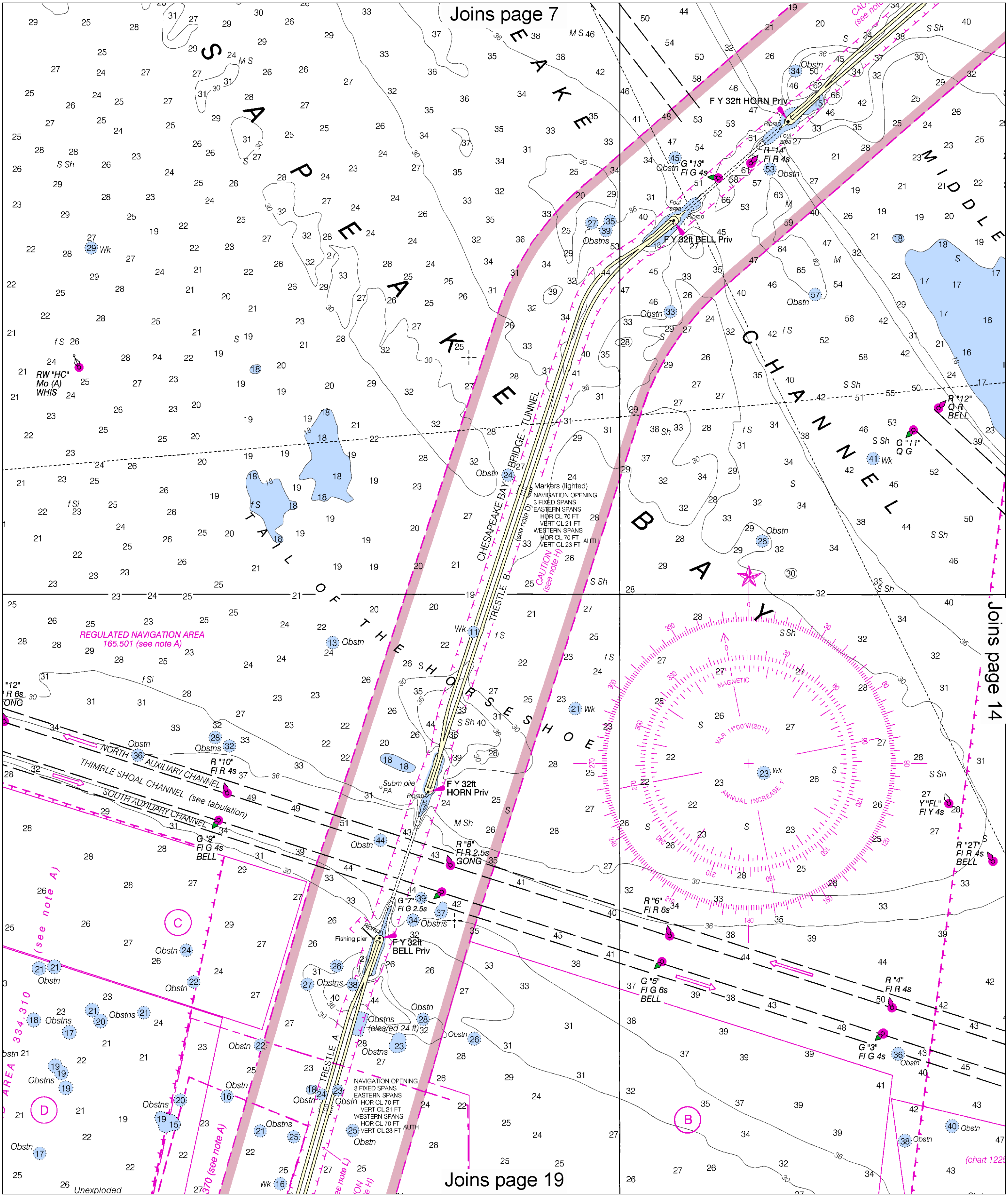
Note: Chart grid lines are aligned with true north.

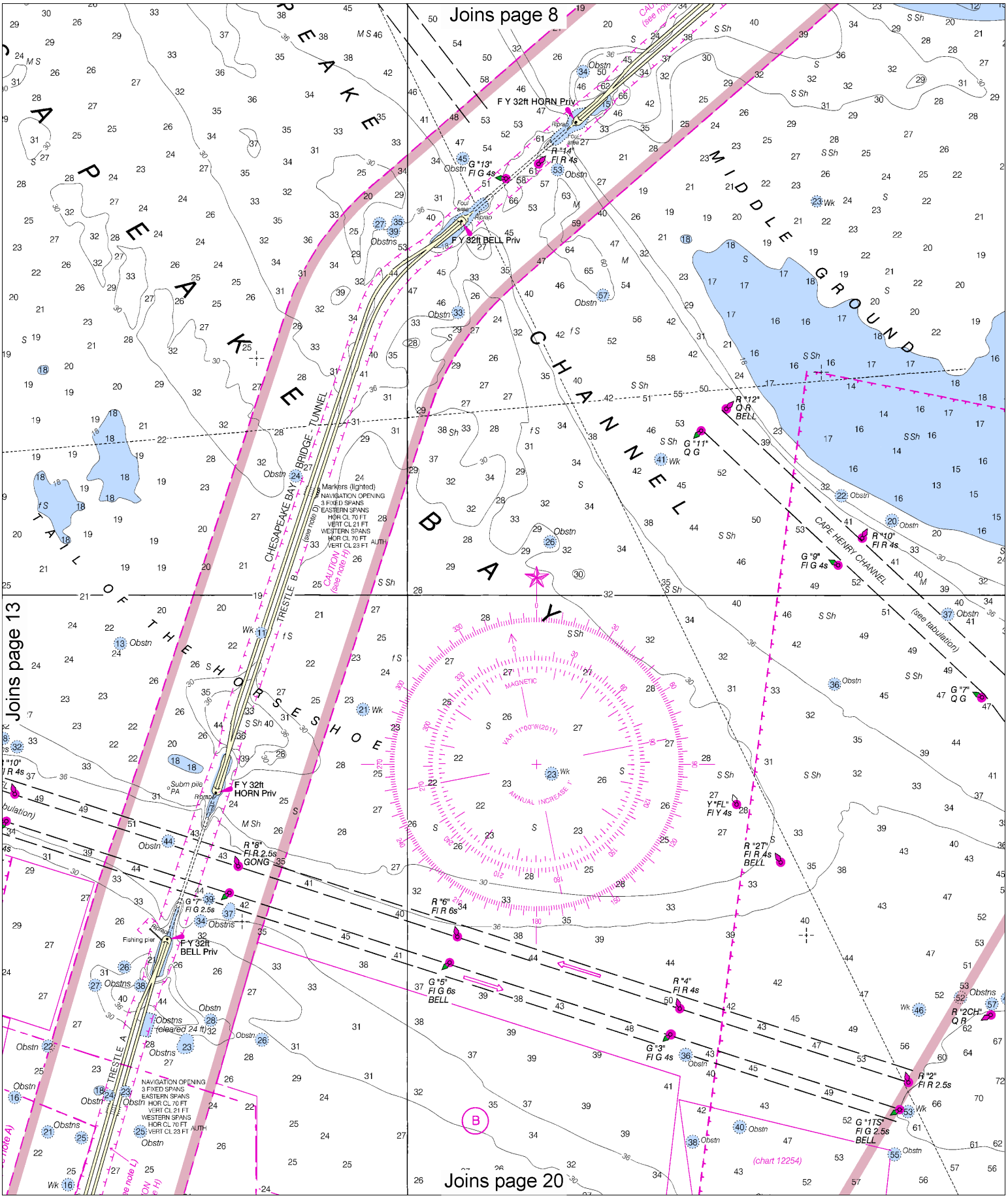
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 7
Joins page 14
Joins page 19
CHESAPEAKE BAY
MIDDLE CHANNEL
TAIL OF THE SHOE
THE HORSESHOE
CHESAPEAKE BAY BRIDGE - TUNNEL
TRESTLE B
TRESTLE A
REGULATED NAVIGATION AREA
165.501 (see note A)
NORTH AUXILIARY CHANNEL
THIMBLE SHOAL CHANNEL (see tabulation)
SOUTH AUXILIARY CHANNEL
CAUTION (see note H)
RW "HC" Mo (A) WHIS
F Y 32ft HORN Priv
F Y 32ft BELL Priv
G "13" Fl G 4s
R "14" Fl R 4s
R "12" Q R BELL
G "11" Q G
Markers (lighted)
NAVIGATION OPENING
3 FIXED SPANS
EASTERN SPANS
HOR CL 70 FT
VERT CL 21 FT
WESTERN SPANS
HOR CL 70 FT
VERT CL 23 FT
AUTH
R "10" Fl R 4s
G "9" Fl G 4s BELL
R "8" Fl R 2.5s GONG
G "7" Fl G 2.5s
R "6" Fl R 6s
G "5" Fl G 6s BELL
R "4" Fl R 4s
G "3" Fl G 4s
Y "FL" Fl Y 4s
R "2T" Fl R 4s BELL
MAGNETIC
VAR 11°00'W(2011)
ANNUAL INCREASE
Subm pile PA
Fishing pier
Obstns (cleared 24 ft)
(see note A)
AREA 334.310
(chart 12254)
Unexploded



14

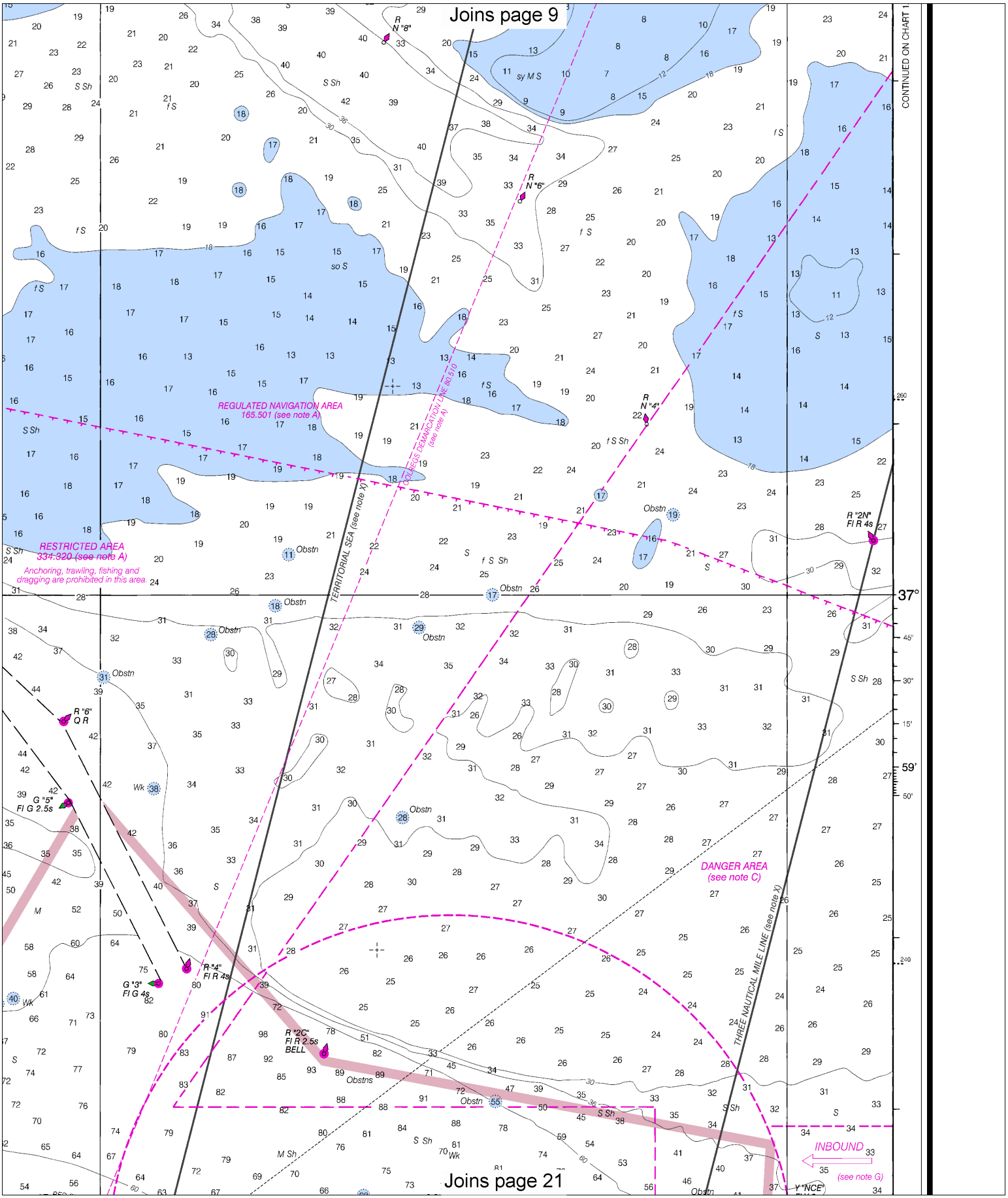
Note: Chart grid lines are aligned with true north.

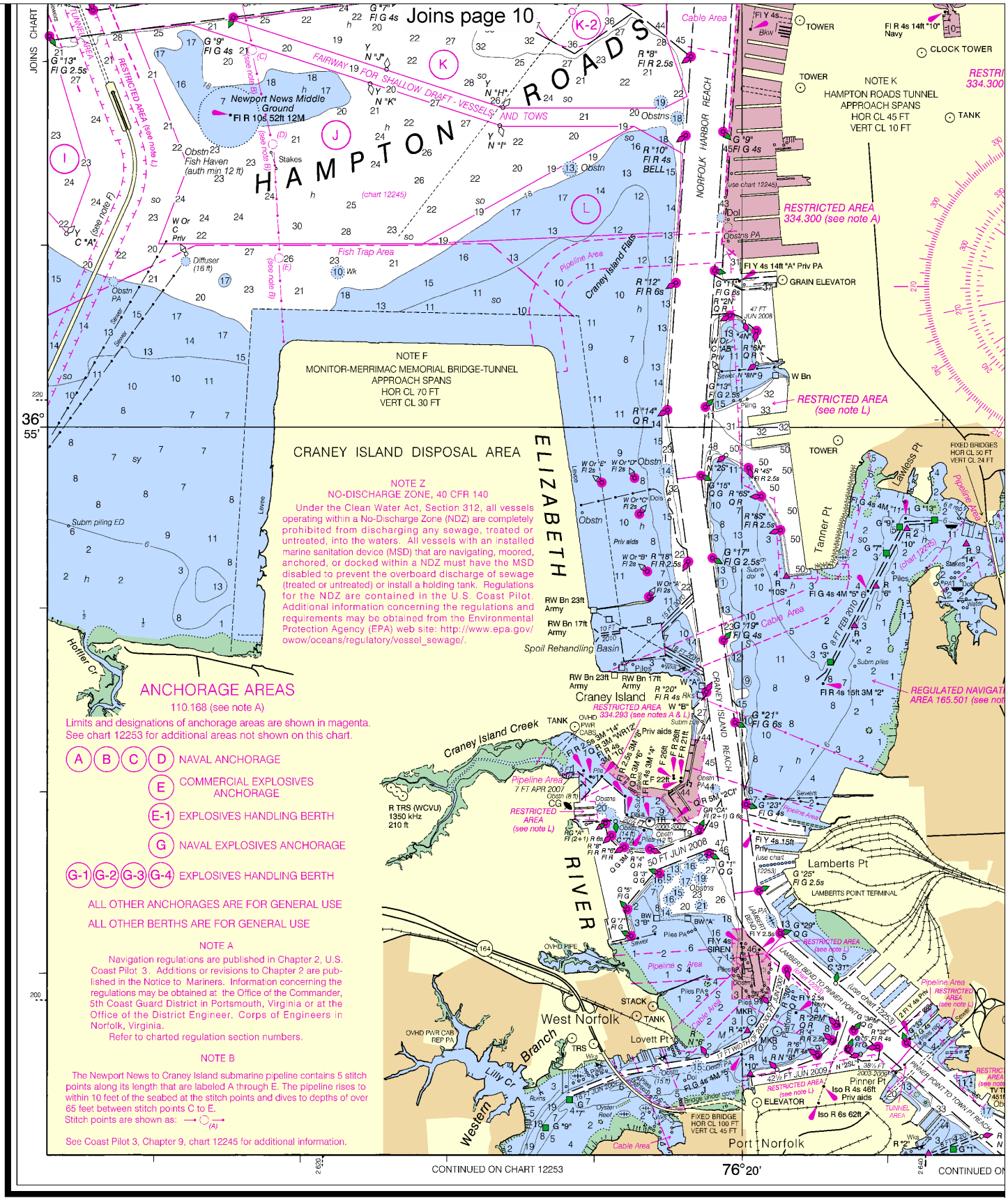
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 9
CONTINUED ON CHART 1
R "8"
R "6"
R "4"
R "2N" Fl R 4s
sy M S
S Sh
f S
so S
f S Sh
REGULATED NAVIGATION AREA
165.501 (see note A)
LOCAL REGS. DEMARCATION LINE 80.510
(see note A)
TERRITORIAL SEA (see note X)
RESTRICTED AREA
334.320 (see note A)
Anchoring, trawling, fishing and
dragging are prohibited in this area.
Obstn
R "6"
Q R
G "5"
Fl G 2.5s
R "4"
Fl R 4s
G "3"
Fl G 4s
R "2C"
Fl R 2.5s
BELL
Obstns
Wk
DANGER AREA
(see note C)
THREE NAUTICAL MILE LINE (see note X)
INBOUND
(see note G)
Y "NCE"
37°
59'
Joins page 21



53rd Ed., Oct. / 11 ■ Corrected through NM Oct. 15/11
Corrected through LNM Oct. 4/11

12222

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart ha
Ocean Service encourag
improving this chart to t
Service, NOAA, Silver Sp

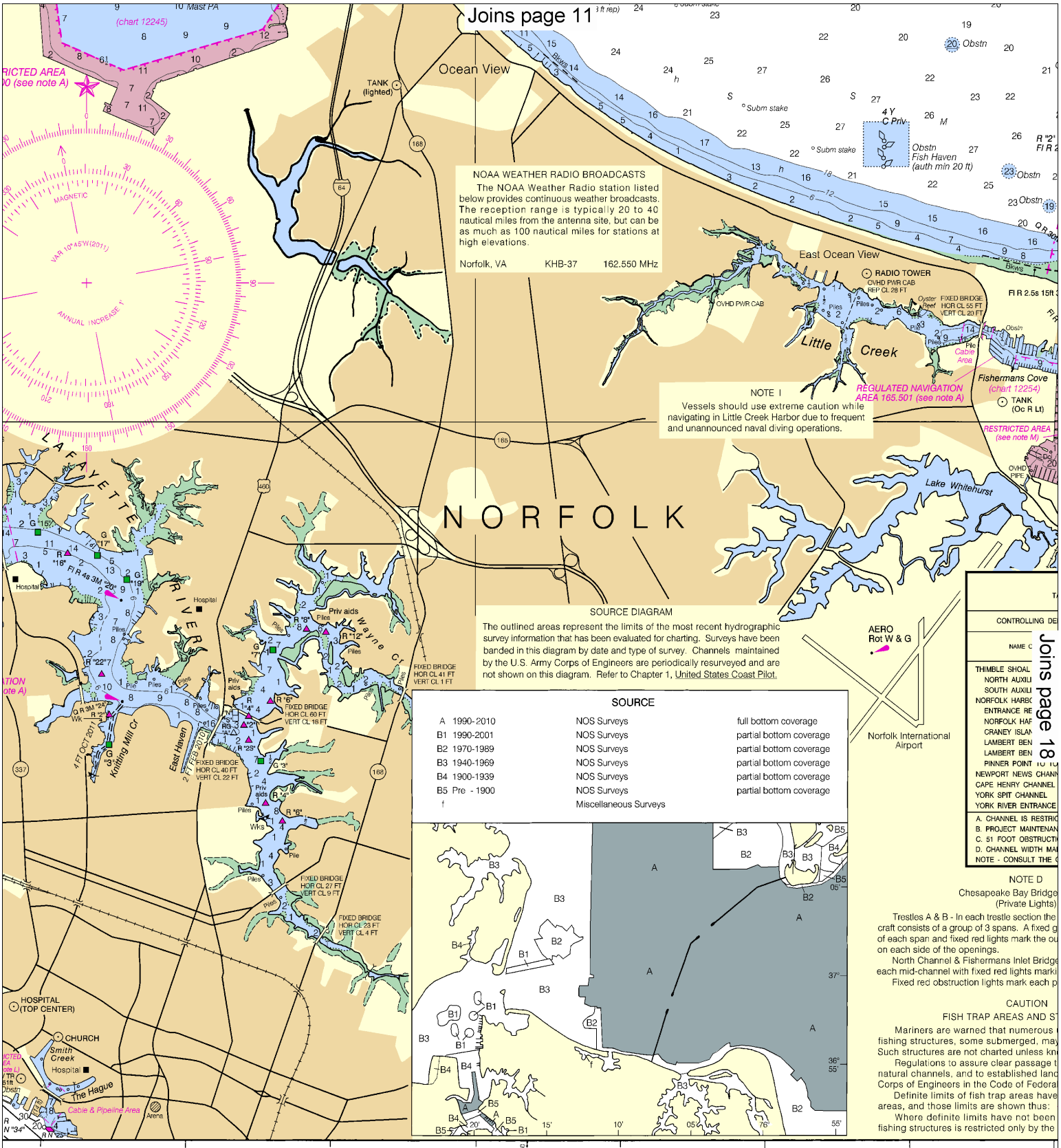
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

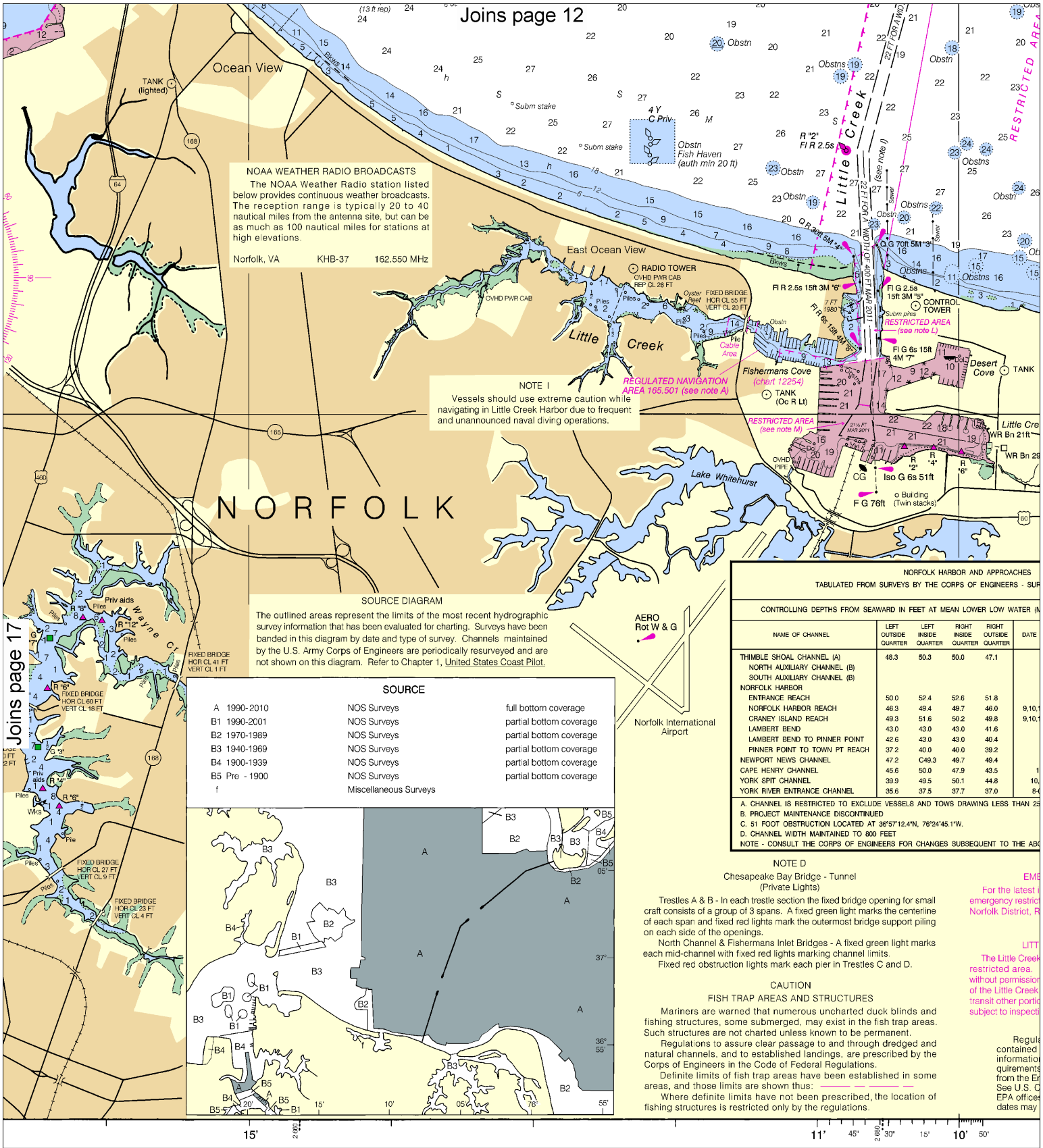
Joins page 11



has been designed to promote safe navigation. The National
ges users to submit corrections, additions, or comments for
the Chief, Marine Chart Division (N/CS2), National Ocean
Spring, Maryland 20910-3282.

Joins page 12

Joins page 17



NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Norfolk, VA	KHB-37	162.550 MHz

NOTE I

Vessels should use extreme caution while navigating in Little Creek Harbor due to frequent and unannounced naval diving operations.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A 1990-2010	NOS Surveys	full bottom coverage
B1 1990-2001	NOS Surveys	partial bottom coverage
B2 1970-1989	NOS Surveys	partial bottom coverage
B3 1940-1969	NOS Surveys	partial bottom coverage
B4 1900-1939	NOS Surveys	partial bottom coverage
B5 Pre - 1900	NOS Surveys	partial bottom coverage
f	Miscellaneous Surveys	

NORFOLK HARBOR AND APPROACHES

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SUR

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (M

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE
THIMBLE SHOAL CHANNEL (A)	48.3	50.3	50.0	47.1	
NORTH AUXILIARY CHANNEL (B)					
SOUTH AUXILIARY CHANNEL (B)					
NORFOLK HARBOR					
ENTRANCE REACH	50.0	52.4	52.6	51.8	
NORFOLK HARBOR REACH	46.3	49.4	49.7	46.0	9,10,
CRANEY ISLAND REACH	49.3	51.6	50.2	49.8	9,10,
LAMBERT BEND	43.0	43.0	43.0	41.6	
LAMBERT BEND TO PINNER POINT	42.6	43.0	43.0	40.4	
PINNER POINT TO TOWN PT REACH	37.2	40.0	40.0	39.2	
NEWPORT NEWS CHANNEL	47.2	C49.3	49.7	49.4	
CAPE HENRY CHANNEL	45.6	50.0	47.9	43.5	1
YORK SPIT CHANNEL	39.9	49.5	50.1	44.8	10,
YORK RIVER ENTRANCE CHANNEL	35.6	37.5	37.7	37.0	8-

A. CHANNEL IS RESTRICTED TO EXCLUDE VESSELS AND TOWS DRAWING LESS THAN 25
B. PROJECT MAINTENANCE DISCONTINUED
C. 51 FOOT OBSTRUCTION LOCATED AT 36°57'12.4"N, 76°24'45.1"W.
D. CHANNEL WIDTH MAINTAINED TO 800 FEET
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABO

NOTE D

Chesapeake Bay Bridge - Tunnel
(Private Lights)

Trestles A & B - In each trestle section the fixed bridge opening for small craft consists of a group of 3 spans. A fixed green light marks the centerline of each span and fixed red lights mark the outermost bridge support piling on each side of the openings.

North Channel & Fishermans Inlet Bridges - A fixed green light marks each mid-channel with fixed red lights marking channel limits.

Fixed red obstruction lights mark each pier in Trestles C and D.

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: — — — —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

EME
For the latest i
emergency restrict
Norfolk District, R

LITT
The Little Creek
restricted area.
without permissio
of the Little Creek
transit other portio
subject to inspecti

Regula
contained
informatio
quirements
from the Er
See U.S. C
EPA offices
dates may

SCALE 1:40,000

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

Published at Was
U.S. DEPARTMENT
NATIONAL OCEANIC AND ATM
NATIONAL OCE
COAST S

Note: Chart grid lines are aligned with true north.

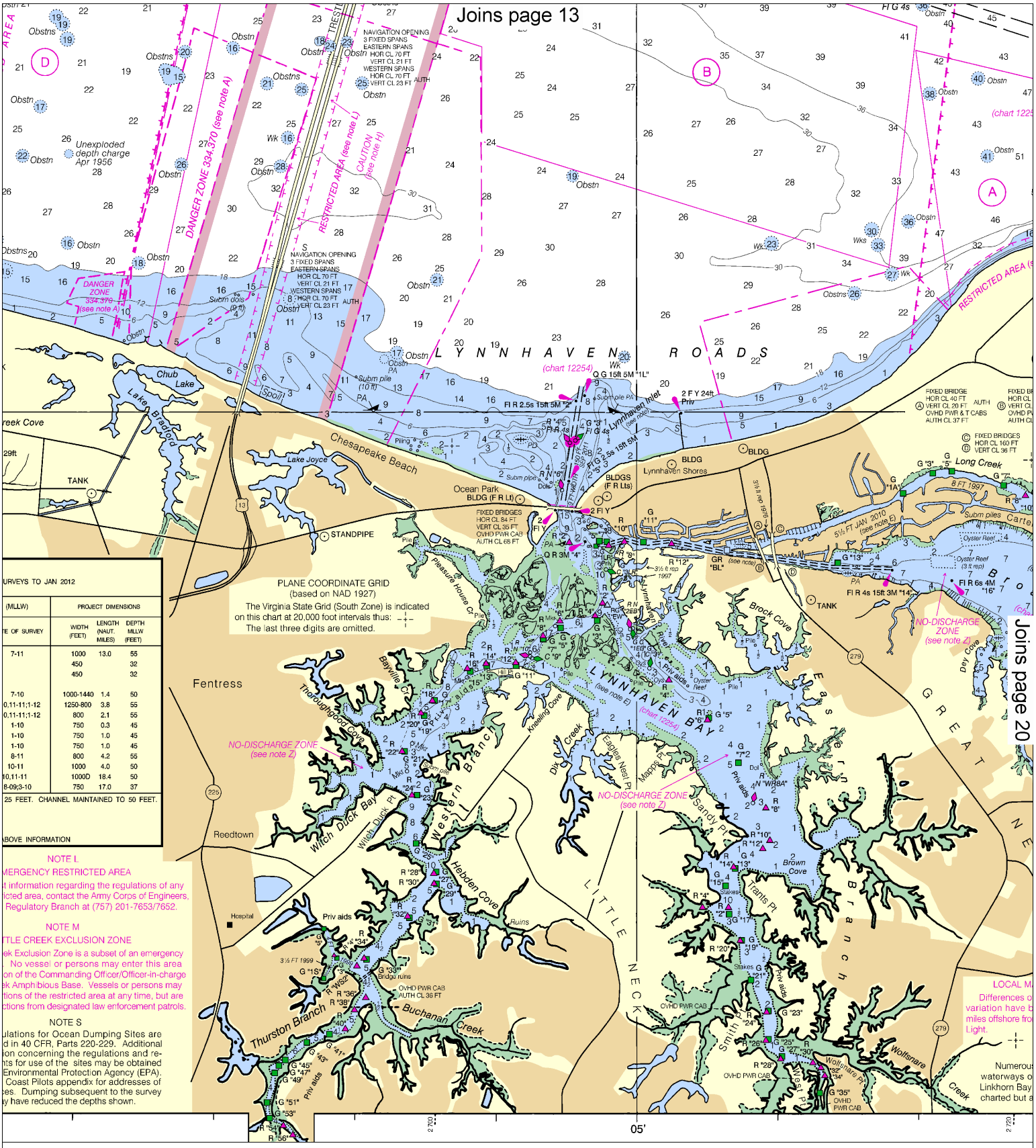
Printed at reduced scale.

~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



URVEYS TO JAN 2012

(MLLW)	PROJECT DIMENSIONS		
E OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
7-11	1000	13.0	55
	450		32
	450		32
7-10	1000-1440	1.4	50
0,11-11;1-12	1250-800	3.8	55
0,11-11;1-12	800	2.1	55
1-10	750	0.3	45
1-10	750	1.0	45
1-10	750	1.0	45
8-11	800	4.2	55
10-11	1000	4.0	50
0,11-11	1000D	18.4	50
8-09;3-10	750	17.0	37

25 FEET. CHANNEL MAINTAINED TO 50 FEET.

BOVE INFORMATION

NOTE L
MERGENCY RESTRICTED AREA
t information regarding the regulations of any icted area, contact the Army Corps of Engineers, Regulatory Branch at (757) 201-7653/7652.

NOTE M
TTLE CREEK EXCLUSION ZONE
ek Exclusion Zone is a subset of an emergency No vessel or persons may enter this area on of the Commanding Officer/Officer-in-charge ek Amphibious Base. Vessels or persons may tions of the restricted area at any time, but are ctions from designated law enforcement patrols.

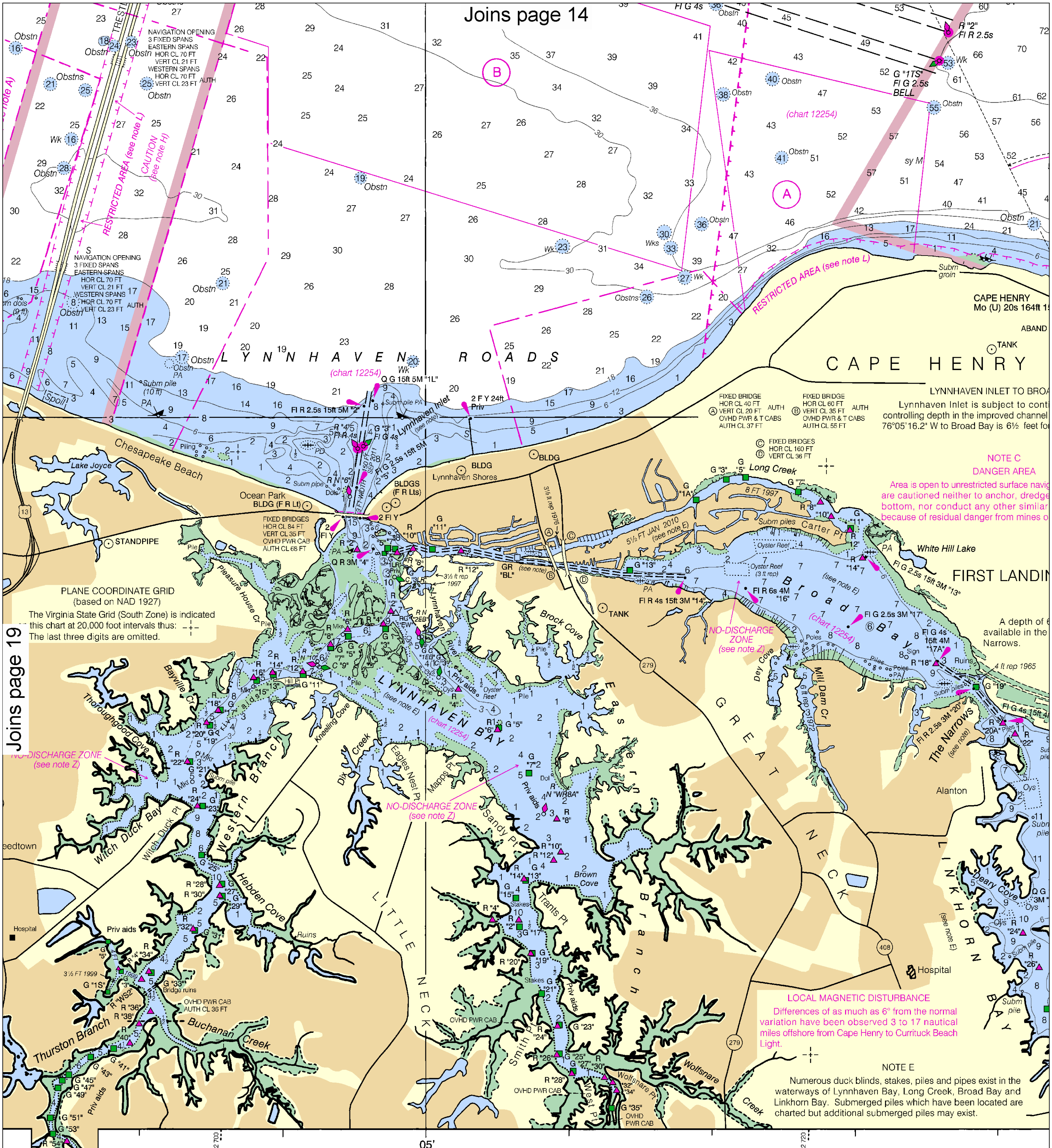
NOTE S
ulations for Ocean Dumping Sites are d in 40 CFR, Parts 220-229. Additional ion concerning the regulations and re- nts for use of the sites may be obtained Environmental Protection Agency (EPA). Coast Pilots appendix for addresses of es. Dumping subsequent to the survey y have reduced the depths shown.

LOCAL M
Differences o variation have b miles offshore fro Light.

Numerous waterways o Linkhorn Bay charted but a

ashington, D.C.
T OF COMMERCE
MOSPHERIC ADMINISTRATION
EAN SERVICE
SURVEY

SOUNDINGS I



SOUNDINGS IN FEET

FATHOMS
FEET
METERS

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000

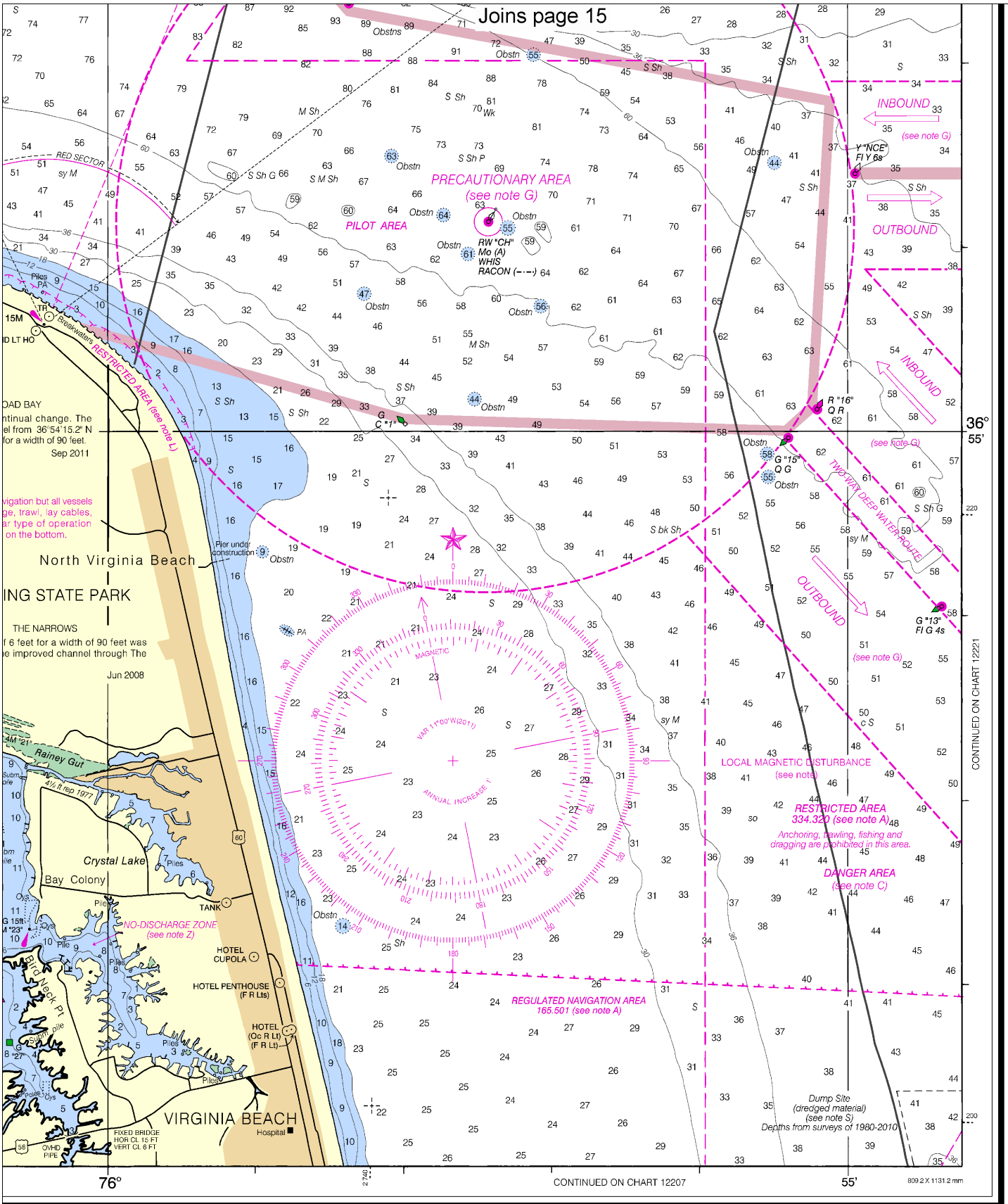
Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.



Cape Charles to Norfolk Harbor

SOUNDINGS IN FEET - SCALE 1:40,000

12222

ED NO. 53

NSN 7642014010301 NGA REFERENCE NO. 12AHA12222

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

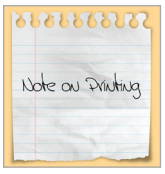
All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
Online chart viewer	—	**http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

twitter —— For the latest news from Coast Survey, follow **@nauticalcharts**



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey The Nation's Chartmaker